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## MARKETING ACTIVITIES





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#### MARKETING ACTIVITIES

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# Methods of Prepackaging Fresh Cherries Studied

By Fred H. Westberg and Donald R. Stokes

Comparisons of the cost of packing cherries in four types of consumersize containers and the conventional wooden shipping box, in the 1950 season, showed that prepackaging them in transparent film bags was the least expensive of five methods studied. Cherries packaged in these bags sold at retail at somewhat lower prices than those in the other types of containers.

#### Five Types of Containers Examined

The project was carried out by the Washington State Fruit Commission under contract with PMA. Five types of containers were studied: Transparent film bags, window cartons, plastic baskets, overwrapped trays, and the conventional 15-pound wooden boxes with the cherries faced in rows. Row-packing and facing cherries in the conventional boxes cost about 30 cents more per 15 pounds than packing them in transparent bags. The cost of packing in the other containers was higher than in either the film bags or the conventional boxes.

PMA emphasized that these findings are based on a single year's work, and that these relationships may or may not hold true over a longer period. Also, the progress report on this research is not related at all to the present situation of limited supply of transparent films for prepackaging. The study, conducted by PMA under the Research and Marketing Act of 1946, covered 41 carloads of prepackaged cherries shipped by four plants in California, Washington, and Oregon during the 1950 season.

In this cost and efficiency study, new or modified pieces of equipment were developed. They included a new sorting and packing table, a new mechanical box dumper for dumping cherries from field boxes onto a sorting table, a new bag holder for filling consumer—size bags of cherries, and a blower device for removing leaves and other debris from the cherries, before they are sorted.

The total cost of prepackaging cherries in transparent film bags, including the cost of packaging materials, shipping containers, labor, and pre-cooling, was 56 cents for the equivalent of a 15-pound, double-row faced box—the conventional wooden box pack. This was 30 cents less than the comparable figure of 86 cents for packing the 15-pound faced box, in which the top two layers of cherries are individually sized and placed in rows by hand. The cost of packaging materials and labor was somewhat higher on the other three types of consumer packages. The total

cost amounted to 97 cents for window cartons, \$1.36 for plastic baskets, and \$1.72 for overwrapped trays for the equivalent of a conventional 15-pound faced box.

The market price for the cherries prepackaged in the film bags, f.o.b. shipping point, was somewhat lower than for comparable cherries packaged in the 15-pound faced box. On the other hand, the f.o.b. price for cherries prepackaged in window cartons, plastic baskets, and overwrapped trays averaged somewhat higher than for comparable cherries packed in the 15-pound faced box.

#### New Sorting-Packing Table Developed

Studies were undertaken during the past season also to develop more efficient techniques of packaging cherries in consumer packages by analyzing the cost of various operations, and by making motion and time studies. These studies also revealed the need for using more efficient equipment. Some new experimental equipment was developed which will be further tested during the coming season.

One new development was a new table for sorting and packing cherries. It can be used for packaging cherries either in consumer packages or in the standard boxes. An important characteristic of the new table is that it enables the operator to roll the cherries into the container rather than lift them, which greatly reduces hand movement. Culled cherries are discarded at both sides of the table by tossing them against canvas disposal units, rather than on one side only, as was previously done. This not only enables the operator to discard the culls faster, but also permits her to keep her eyes closely on the sorting before her. Preliminary tests carried out last year indicated that the average production increased 20 percent when the new table was used for prepackaging cherries.

#### Box Dumper and Bag Holder Devised

A new mechanical box dumper also was developed to lessen the rough treatment and bruise damage to the cherries when they were pulled by hand from the box to the packing table by the operators. Important features of the mechanical dumper are that it allows the boxes to tip over gradually. This reduces the distance the cherries must fall into the sorting area. The mechanical dumper enables the box to stop at any tipped position and continues to hold the box in that position. Cherries are dumped onto the table by pulling forward on a large lever. The mechanical box dumper utilizes a "deadman" type switch lever which permits the box to return to its original position by pressure on two levers at the same time.

A bag holder also was developed for use in filling film bags with cherries. The U. S. Department of Agriculture has taken steps to apply for a public patent on the bag holder device. A previous method, used by one of the cherry prepackaging plants cooperating in this study, required the worker to hold the bag open with one hand and fill in the cherries with the other. Another packer followed the practice of having the worker fill a cylinder with the desired quantity of fruit, which was

then dumped into a film bag. Another plant had already developed a method of automatically filling film bags with the desired quantity of fruit.

This automatic method of filling bags was found to be very efficient for large-scale operations. The bag holder was developed for smaller operations. The bag holder is mounted on a scale located between the worker and a moving conveyor belt containing loose cherries. The opening of the bag fits over an expanding type of collar on the bag holder, which then holds the bag firmly in position for filling. The operator rolls the cherries with both hands from the belt into the bag until the desired weight is reached, after which she releases the collar and removes the filled bag of cherries. The bag can then be closed by stapling a saddle header on it or by various types of heat-sealed closures.

#### Cleaning Device Removes Leaves and Trash

The blowing device was adapted especially for removing leaves and other foreign materials from cherries before the sorting operation. The cherries are brought in from the orchard, dumped on conveyors, and then blown free of dead leaves, debris, or blossoms, before they are passed on to the sorters. In one plant, it was estimated that the use of such a blower would eliminate the services of 5 employees out of a crew of 48 employees engaged in sorting cherries.

Additional work is planned for the coming season to: (1) Determine the comparative cost of packaging cherries by different methods and in various types of consumer packages; (2) determine the comparative spoilage losses and cost of retailing cherries in prepackaged units and in the 15-pound faced box; (3) determine the salability of cherries in different types of consumer packages and in comparison with the 15-pound faced box; and (4) provide additional assistance to the cherry prepackaging industry in developing and adopting more efficient methods and practices in prepackaging cherries.

It should be pointed out that in this defense mobilization period, consideration will have to be given by packers to present and prospective supplies of transparent film before plans are made to package fresh cherries with this material.

#### PMA STATE COMMITTEES TO ACCEPT NEW CONSTRUCTION APPLICATIONS

USDA has advised farmers, food manufacturers and processors, and wholesale food distributors, of procedures to follow in applying for approval of construction of necessary new facilities under National Production Authority Order M-4. State PMA committees have been authorized to receive applications, either directly from applicants or on referral from NPA field offices, which previously have handled such applications. For the time being, all applications filed with the State committees will be forwarded to the PMA Office of Materials and Facilities, in Washington, for final action.

# Research in the Trucking Of Perishable Products

By J. C. Winter

Between 1900 and 1920, farmers depended principally upon two methods of transportation. They used horses and mules to haul their produce to nearby towns or cities, and if further transportation was necessary, they used the railroads.

The advent of the motortruck in the 1920's as a practicable agency of transportation helped to produce what may be described as a revolution in the marketing of many farm products. In 1920, approximately one million trucks were registered in the United States. By 1929 that number had risen to 3,400,000. In 1949 we had nearly 8,000,000 trucks of all kinds. Of those 8,000,000, approximately 2,200,000 were farmer owned and operated, and about 1,000,000 were employed in the for-hire transportation of commodities.

#### Advances in Mechanization

During this same period great advances were also being made in the mechanization of farm operations. As of January 1, 1950, there were about 3,825,000 tractors on farms. In 1920 there were about 21,000,000 horses on farms. Today there are fewer than 6,000,000, and the decline in the economic importance of that tool of production and agency of transportation is indicated by the fact that a horse is worth only about half what it was 30 years ago. As a matter of fact, there is an average of less than one horse per farm in the United States today.

So, for all practical purposes, we may say that the farmer now depends on the motortruck and the railroads for the marketing of his products. Let us look at this marketing system in two stages. First the movement from the farm, and second, movement from country points or primary markets to other places after the initial move from the farm has been completed.

The first of these steps, the movement off the farm, is nearly 100 percent by truck. According to a recent study of the Bureau of Agricultural Economics, about half of that off-farm movement is in the farmer's own truck, about one-third is in for-hire trucks, and the remainder in trucks owned and operated by the buyer.

As to the second stage, railroads haul a heavy volume of agricultural commodities, both perishable and nonperishable. Nevertheless, the

tonnage moving by motortruck has steadily increased over the years. It is estimated that approximately 50 percent of fresh fruits and vegetables moves to terminal markets by motortruck, and some of those hauls are well in excess of a thousand miles.

In 1949, between 70 and 75 percent of all the cattle, calves, and hogs moved to our public livestock markets by truck. More than half the butter, and more than 80 percent of the eggs and poultry, are estimated to move to final markets by truck.

Modern communication has helped this trend. Market news is flashed across the country by telegraph and disseminated to the farmer through daily market news programs on local radio. To take advantage of favorable market conditions, shippers of farm products need up-to-date market information and efficient transportation.

Consequently, the farmer, the processor, and the manufacturer of farm products and foods, have become more and more dependent upon trucks as one of the principal means of getting these food products to the consumer speedily and economically.

#### Highly Perishable Commodities

As these trucking services have matured with the technological improvements in truck equipment and the techniques of using them, the movement of highly perishable commodities, such as eggs, meats, fish, poultry, and fresh fruits and vegetables, is being entrusted to the trucking industry.

The perishability of these commodities raises new problems for the truck operator. How can he safely transport perishables over the long distances they now move to market? How can he keep them whole and fresh in appearance so that they will be placed in the grocer's display cases or bins with the wholesome attractiveness that entices the housewife to buy? And how can the motortruck operator avoid the damage and deterioration that means a loss and damage claim from the shipper or receiver—a claim that may wipe out not only the profit received from the transportation of that load but of many others as well?

These are problems that face every transporter of perishable food commodities, whether by railroad or motortruck. Our concern is to assist the carriers in finding ways to reduce their losses and bring about more efficient and less costly transportation of our farm products. We know that every dollar paid out in freight claims indirectly has to come from the shipper in the charges he pays for transportation, and that every pound of food damaged or spoiled is an economic loss which should be minimized as much as possible. Further, all the damage that may occur to commodities in transportation is not always evident at the time the shipment is delivered. Particularly in the case of perishables, the commodity may break down after it reaches the retail store or after it has been purchased by the housewife.

Until a few years ago, research in the improvement of the physical means of transporting agricultural commodities was limited almost entirely to the testing and study of means of protection against the effects of heat and cold upon commodities moved by railroads. Facilities for research in the trucking field were limited, and little attention was given to that aspect of transportation research until after the passage of the Research and Marketing Act of 1946.

So far, USDA has conducted some 150 truck tests of the movement of fresh fruits and vegetables and frozen concentrates, and it is hoped that activities in the field will be expanded this year and next.

One difficulty encountered in research in the transportation of perishables by motortruck is the great flexibility and diversity of the motor carrier industry itself. So many different types of equipment are used in such diverse ways and under such a variety of conditions that it seems impossible to fix upon any one type of equipment for examination, or any one kind of movement that will be typical of even a small fraction of perishable movements.

#### Refrigerator Cars

There has been a pretty fair degree of uniformity in railroad refrigerator cars during the last 30 years—in dimensions of the car, size and construction of ice bunkers, and means of air circulation. Consequently, when USDA conducted tests with cars of several types, it found pieces of equipment that were fairly representative, as a group, of those in regular use throughout the United States. It isn't that simple in the case of trucking equipment. Improvements in truck trailers have come fast, and many that are not very old in years are already obsolete in design.

The best thing the researchers can do is to work with the newer types of equipment, or with experimental units. By seeing how this equipment performs and the kind of service it gives, the researchers try to bring about further improvements to overcome the deficiencies, if any, that are found in the equipment, or the method of its use.

As an example of this approach is the series of tests USDA conducted last year in connection with the transportation of citrus concentrates from Florida to northern markets. A report on the results of these tests is in preparation. The tests were started in April 1950 and continued through October in order to obtain data on shipments moving during the heat of the summer, as well as the cooler weather of spring and fall. Two types of tests were made. The first was a test in which observers accompanied the vehicle from the point of origin to the destination, taking periodic temperature readings and making notes of conditions affecting the refrigeration of the vehicle while enroute. Commodity and air temperatures were obtained by means of electric resistance thermometers with bulbs placed in 12 locations throughout the load and at various points inside the trailer. These thermometers were connected through leads to a master cable which was extended outside by means of a flexible

door plate. Temperature readings were made by plugging a special reading box into this master cable, which enabled the observer to ascertain the commodity or air temperature at any location at any time.

In the other type of test, four or more recording thermometers were placed inside the trailer, recording temperatures at the top, bottom, and center of the load. Two of the 23 trailers used in these tests were refrigerated with dry ice and the remainder with mechanical refrigerating units. The trailers using dry ice had only  $3\frac{1}{2}$  inches of insulation, which is considered light for the maintenance of air temperatures desirable for frozen concentrates and other frozen foods. In addition to the light insulation, these 2 loads were covered with a tarpaulin, which obstructed the circulation of air around the load.

Tests of those shipments showed a rise in commodity temperatures during the period of transportation from Florida to Lafayette, Ind. from  $-12^{\circ}$  at time of loading to an average of  $+7^{\circ}$ , with some positions  $+12^{\circ}$  upon arrival. In the first 13 tests with mechanical refrigerating units in trailers having 6 inches of insulation, average load temperatures upon arrival at destination ranged from  $-2.5^{\circ}$  to  $+10^{\circ}$  with maximum commodity temperatures of  $16^{\circ}$  to  $18^{\circ}$  in certain positions. These "hot spots" were believed to have been caused by inadequate circulation of air around and under the load.

To improve this condition, a return air duct was proposed and constructed in the nose of the trailer to draw the return air flow back to the refrigerating unit from the floor instead of over the top of the load. In addition, a modified loading plan was tried which eliminated one row of packages from the bottom layer. The remaining rows of packages were centered on the floor providing channels along each wall to receive air flowing down the space between the sidewall slats. This increased the circulation of air along the floor to the return air duct in the nose of the trailer. With these modifications, the spread between top and bottom commodity temperatures was materially reduced in the later tests and the "hot spots" were virtually eliminated. In these tests of the air duct system which had been devised, one unit was used which had been equipped with the air ducts, the cost of which was nominal. Also used was a conventional unit without ducts, so that the differences in performance between the two types could be measured.

#### Refrigeration Capacity Adequate

The refrigeration capacity of the mechanical units was found to be adequate even for the very low temperatures required by the frozen concentrate. However, mechanical difficulties with those units were encountered on a number of tests which in some instances could have been taken care of by the operator of the truck, had he been properly instructed and furnished with a minimum of repair parts.

Many truck lines have taken pains to instruct their drivers in the proper use and care of the vehicles and auxiliary equipment. Many truck lines also have excellent preventive maintenance programs at their various terminals. But things do happen on the road, and they may have serious

consequences. The researchers observed, for example, several instances of broken drive belts on the refrigerating units. In the cases where the driver had not been furnished with a spare belt, the unit was out of operation until the driver reached a place where another belt could be obtained and installed. Under such circumstances, the drivers cannot be blamed for losses and damage claims.

#### Wall and Floor Racks

One important point is the need for wall and floor racks designed to provide enough space for adequate air circulation around and under the load. Most railroad refrigerator cars have floor racks with 4 to 6 inches of space for the circulation of air. The trailers thus far observed in the tests in the transportation of frozen foods have had channels in the floor, perhaps 3/4 to  $1\frac{1}{2}$  inches wide and high, spaced about  $1\frac{1}{2}$  inches apart. Consequently, approximately one-half of the bottom layer of the load is resting on the floor, and even with 6 inches of insulation there is still passage of heat from the outside to the load. Channels of such dimensions as these are not adequate to pull the air underneath the loads and furnish the refrigeration which the mechanical refrigerating unit is capable of delivering. Most important, racks or channels should not be permitted to be blocked off at any point—at the doorway, under the load, or at the nose of the trailer—which would prevent free circulation and return of air.

Higher floor racks would reduce the cubic capacity of the trailer slightly and mean some small additional weight--which is, of course, desirable to keep at a minimum.

Even so, unless means are provided for the circulation of refrigerated air around the load, the benefit of the refrigeration delivered from the unit will not be obtained. Cold air that doesn't get to the places where it is needed does not do its job.

In connection with the movement of citrus concentrate, it was also noticed that there was no protection of the truck trailers during the loading period, to conserve the effects of precooling. This might be accomplished by loading through tunnels or by hanging a heavily insulated split curtain over the rear door during the loading period. That feature, however, would seem to be a responsibility of the shipper rather than the truck line.

In addition to the types of work mentioned thus far, USDA is following up last year's work with some additional tests on two new types of trailers—one refrigerated with dry ice and another employing the coldwall principle. These tests are in progress now.

All of the USDA research up to this time has been conducted in the field of fresh fruits and vegetables and citrus concentrates. Frezen poultry, fresh and frezen meats, and some of the other perishable commodities are expected to be added to this list soon.

The research workers are interested in more than just the protection of the commodity. In their study of carrier equipment, whether it is a railroad car or truck, they observe the amount and kind of insulation, the construction of the car or the trailer body dimensions, the type and dimensions of floor racks, and the provision for sidewall ventilation, if any. They study the loading pattern employed in stowing the commodity in the truck, the breakage of containers and the condition of their contents, and they note whether the loading pattern aids or interferes with the proper circulation of air.

Moreover, they want to know how much it costs to provide the various kinds of refrigeration or heating services. They are interested in the economy of transportation as well as the effect upon the commodity itself. Expensive services are not desirable unless they are absolutely necessary. These workers want to assist the carriers in providing the best transportation possible at the lowest cost.

#### Truck Lines Can Help

There is one way in particular in which the truck lines can help in this research. Considerable losses have resulted in the transportation of food simply because the operators or drivers of the trucks have not been told what temperatures should be maintained to protect the product. Some fruits and vegetables, for example, should have transit temperatures only slightly above freezing. Others should have temperatures of 45 to 55 degrees to prevent too fast ripening, and yet they must not be chilled. Other commodities, such as dairy and poultry products, or meat, have still different requirements. At the suggestion of members of the truck and trailer industry, USDA is now working to bring together all the available information, and to develop further information as needed, on optimum temperatures and proper care, loading, and handling of the dif-ferent commodities. This information is to be published in simple language, with a minimum of words and a maximum of clarity, in a small pocket-sized booklet that could be distributed to shippers and to truck lines for the guidance of drivers and terminal personnel. As the work proceeds, we would like to have from representatives of the truck lines their suggestions as to particular items of information that would be desirable and useful in connection with the transportation of individual commodities. This information can then be put into the publication.

For example, a truck builder or operator may have found that a simple change in interior construction of the trailer or that the arrangement certain types of packages in the trailer lends to the proper distribution of refrigeration through the load. Or it may have been discovered that the use of a certain loading pattern, or some method of dampening vibration may have reduced the breakage of eggs, a common cause of damage claims. It would help other members of the trucking industry to have such information, and our primer may be the means of disseminating it. USDA will test out such ideas under various operating conditions. If they are found to be workable and practical, they will be incorporated in the primer.

### Dairy Products and Parity

By H. J. Emery

The parity price concept was recognized by Congress in the original Agricultural Act of 1933. The act set forth a policy of establishing prices to farmers that would give agricultural commodities, including dairy products, a purchasing power for the things that farmers buy, equivalent to their purchasing power in a base period which, for most commodities, was the 5 years just before World War I. This parity concept, with a few modifications, has been continued in subsequent price support and other legislation.

A complete definition of parity prices would mean spelling out the provisions contained in several paragraphs of the Agricultural Acts of 1948 and 1949. But here is a simplified definition of parity prices that covers, in a broad way, most agricultural commodities: Parity prices are prices that will give agricultural commodities in general the purchasing power they had during a base period, in terms of prices of commodities farmers buy, interest on mortgage indebtedness, taxes on farm real estate, and, for most commodities, wage rates paid to hired farm labor.

#### Parity Commodities

The Department of Agriculture publishes every month the current parity prices for about 160 farm commodities. These parity prices, and the data used in computing them, as well as the actual current farm prices of agricultural commodities, appear in the publication entitled "Agricultural Prices," which is issued near the end of each month.

The only commodities for which there are parity prices are those commodities that farmers sell. The parity prices are in terms of prices received by farmers for such commodities. There are no parity or parity equivalent prices for such dairy products as cheese, butter, and nonfat dry milk that are made from milk and butterfat and are sold by manufacturers and handlers.

Two dairy parity prices are computed monthly. One is the U. S. average parity price of "milk, wholesale" which includes all milk sold by farmers to dairy product manufacturing plants and to fluid milk dealers. It is a national average parity price for milk of yearly average butterfat test in all uses. The other parity is the U. S. average parity price of butterfat in farm-separated cream sold by farmers, primarily to creameries for manufacturing butter.

The Department does not determine parity prices for milk or butterfat by areas or uses. The published parity prices for milk and butterfat are national averages. They are not parity prices for particular locations or uses or for individual farmers.

#### Parity Calculations

The parity prices of milk and butterfat are computed by multiplying their adjusted base period prices by the parity index.

The "adjusted base period prices" to be used in calculating parity prices for milk at wholesale and butterfat during the calendar year 1951 are \$1.70 per hundred pounds of milk and 27.2 cents per pound of butterfat. These are the actual average prices in the August 1909 - July 1914 period, adjusted according to a provision in the Agricultural Act of 1949 to modernize parity. The base period prices are recalculated and may change slightly at the beginning of each calendar year.

The modernized parity provision recognizes long-time changes in price relationships among agricultural commodities. It adjusts the base period prices so that the calculated present parity prices of the different commodities will show the same relationships to each other as their actual prices during the last 10 years. In general this provision has increased the parity prices of livestock products somewhat and lowered the parity prices of grains, as compared with what they would have been without this adjustment provision.

The adjusted base prices for use in calculating milk and butterfat parity prices during 1951 were computed as follows: Prices received by farmers for all farm products during the 10 years 1941-50 averaged 218 percent of the 1910-14 average level. The 1941-1950 average price of milk at wholesale was \$3.70. This price is 218 percent of \$1.70 which is the calculated adjusted base price for milk at wholesale (3.70 • 218 x 100 = 1.70). Similarly, the 1941-50 average price of 59.2 cents per pound of butterfat is 218 percent of 27.2 cents which is the adjusted base price for butterfat.

The parity index is the current level of prices, interest, taxes and wages paid by farmers for production and living cost items, expressed as a percentage of the 1910-1914 base period level. This "Index of Prices Paid by Farmers" now reflects prices paid by farmers for 335 items of food, clothing, motor vehicles, fertilizer and other things that farmers buy. It also reflects interest payments on farm indebtedness, taxes on farm real estate, and wages of hired farm labor. The parity index may change from month to month, and when it does it changes the parity farm prices of agricultural commodities correspondingly. The parity index in May was 282; that is, the level of prices, interest, taxes and wage rates paid by farmers in mid-May was 282 percent of the 1910-14 level. In April it was 283. In May a year ago it was 253.

The U.S. average parity price for milk at wholesale in May 1951 was \$4.79 per 100 pounds, calculated by multiplying its adjusted base price by the May parity index (1.70 x 282 percent). The U.S. average parity price of butterfat in May was 76.7 cents per pound (27.2 x 282 percent).

For comparison with parity, in the publication Agricultural Prices, the actual prices of milk and butterfat are first adjusted by an index of seasonal variation based on the average seasonal changes in those prices during the 20 years 1922 to 1941. During that period the June prices of milk averaged 89 percent and the November prices 110.1 percent of the yearly average prices, while the prices in the other months averaged within that range. The seasonal index for butterfat ranges from 91.6 in June to 109.5 in December. In terms of prewar price levels these indexes represented fairly moderate seasonal swings in prices. Applied to present price levels, however, they represent relatively wide swings compared with seasonal storage and carrying costs for dairy products. For this reason it probably would not be feasible to administer either price supports or price ceilings on the basis of such wide seasonal price variations.

#### Parity Prices and Price Support

The Agricultural Act of 1949 requires the support of prices to producers for milk and butterfat at such level between 75 and 90 percent of parity at the beginning of the marketing year as the Secretary of Agriculture deems necessary to assure an adequate supply.

As an administrative guide in carrying out the price support legislation with respect to milk the Department considers that 88.5 percent of the U. S. average parity price for all milk at wholesale represents the U. S. average parity equivalent price for manufacturing milk. This parity equivalent is not itself a parity price but is only an operating differential for use in formulating and administering the support program. The parity equivalent price is published monthly in Agricultural Prices, along with the current U. S. average price and butterfat test of manufacturing milk. Since price supports are based on parity prices as of the beginning of the marketing year, changes in the parity and parity equivalent prices during the year do not affect the support program. Current prices, adjusted to a 3.95 percent butterfat basis, are compared with the announced support levels to determine whether the program is carrying out its objective. The national yearly average butterfat content of manufacturing milk approximated 3.95 percent. It varies seasonally from about 3.8 in early summer to 4.2 in early winter.

On March 15 the Department announced a program to support prices to producers at national average levels of about \$3.60 per hundredweight for manufacturing milk and 67.6 cents per pound for butterfat in farm-separated cream. These levels were about 87 percent of the parity equivalent price of manufacturing milk and 90 percent of the parity price of butterfat for February, the latest month for which parity data were available when the program was announced. Market prices of most dairy products recently have been above levels comparable to the announced support purchase prices. The U. S. average price of \$3.80 for 3.8 percent manufacturing milk in May corresponded to \$3.95 for 3.95 percent milk, or about 35 cents per 100 pounds above the support level. The U. S. average price of butterfat in mid-May was about 2 cents per pound above the support level.

The announced support prices, like the parity and parity equivalent prices, are national average figures. The program is intended to assure

that the U. S. average price received by farmers for manufacturing milk and butterfat will approximate the announced support figures. It is not intended to require or guarantee that every plant will pay every farmer in every locality \$3.60 for milk or 67.6 cents for butterfat. It is anticipated that when the national average prices are at those levels, some plants will pay more and some less than those figures. Historical data show that at any given time there are substantial ranges in prices of milk and butterfat among areas and within States. These differences apparently are associated with quality and uses of milk and butterfat, location relative to outlets, volumes and efficiencies of plant operation, and degrees of competition. The support program does not change this situation.

The announced purchase prices for butter, nonfat dry milk, and cheese are not parity or parity equivalent prices. They are simply those purchase prices that were administratively estimated to result in national average prices received by farmers for manufacturing milk and butterfat about equal to the announced support levels. (The basis of estimating the purchase prices under the current support program is outlined in detail in "Dairy Price Supports April 1951-March 1952," May 16, 1951, Production and Marketing Administration, U. S. Department of Agriculture.) Experience has indicated that, because of the competition in the dairy industry and the rather close inter-regional and inter-product price relations, the price support purchases of dairy products effectively support the general levels of prices of milk and butterfat on a Nation-wide basis.

#### Parity Prices and Price Ceilings

The Defense Production Act of 1950 provides that no ceiling prices shall be established for any agricultural commodity below the parity price, or the highest price of the period May 24 to June 24, 1950, whichever is the higher. The present General Ceiling Price Regulation provides, that for a list of commodities below parity, any increase in price to producers may be added to the selling prices of the products, until the Director of Price Stabilization, after consultation with the Secretary of Agriculture, determines that the requirements of the act have been satisfied with respect to that commodity.

Whereas the price supports are based on parity as of the beginning of the marketing season, the present price ceiling regulation relates to current parity prices. Thus month-to-month changes in parity prices may affect the price ceilings. Another factor that may affect price ceilings for dairy products is the seasonal adjustment in the current prices of milk and butterfat for comparison with parity prices.

The actual U.S. average prices received by farmers in May 1951 were \$4.23 per 100 pounds for milk at wholesale and 69.5 cents per pound for butterfat. These prices adjusted by the May seasonal index were \$4.70 for milk (4.23 \cdot 90 x 100 = 4.70) and 73.4 cents for butterfat (69.5 \cdot 94.7 x 100 = 73.4). These adjusted prices were 98 percent of parity for milk and 96 percent of parity for butterfat.

Parity prices to farmers for agricultural commodities will give them the same purchasing power for things that farmers buy as in a base period. Current parity prices are computed by multiplying the adjusted base period prices by the current index of prices, taxes, interest, and wages paid by farmers for farm production and living expenses. U. S. average parity prices for milk at wholesale and for butterfat in farm-separated cream are published monthly. Changes in parity prices during the year do not affect support rates established at the beginning of the marketing year under the milk and butterfat support program.

The U. S. average price of butterfat and a U. S. average parity equivalent price for manufacturing milk (at 88.5 percent of parity for all milk at wholesale) are used as administrative guides in the support program. Current U. S. average prices of butterfat and current U. S. average prices of manufacturing milk (adjusted for butterfat test) are compared with the announced support prices to determine whether the program is accomplishing its purpose.

The parity and support prices are national averages rather than parity or support prices for individual areas and uses. There usually are substantial ranges in prices paid for milk and butterfat associated with quality, use, plant volume and efficiency, and competition. The support program does not change this situation.

There are no parity or parity equivalent prices of manufactured dairy products. The announced purchase prices are simply those prices estimated to result in the U. S. average prices of manufacturing milk and butterfat equal to the announced support prices.

The present price ceiling regulation provides that, for agricultural commodities below parity, any increases in prices paid to farmers may be added to the selling prices, until the Director of Price Stabilization determines that the legal minimum requirements of the Defense Production Act of 1950 have been satisfied. Since the current ceiling regulation is related to current parity 'prices, monthly changes in parity prices may affect ceiling prices. Also, a seasonal adjustment in current prices of milk and butterfat, for comparison with parity prices, may affect price ceilings.

USDA ANNOUNCES SALE OF
MEXICAN CANNED BEEF AND GRAVY

The U. S. Department of Agriculture has concluded the disposal of approximately 220,000,000 pounds of meat products canned in Mexico in connection with the program to eradicate foot and mouth disease there. Final sales were 6,340,000 pounds of canned beef and gravy to the United Kingdom at 24 cents per pound and 1,500,000 pounds at 25 cents per pound to the Government of Israel, the highest bidders under an announcement made June 5, 1951.

### Marketing Briefs

(The Production and Marketing Administration announcements summarized below are more completely covered in press releases which may be obtained on request from the Office of Information, U. S. Department of Agriculture, Washington 25, D. C. by citing the code number given at the end of each item.)

Cotton. -- An all-out fight against the boll weevil and other insect pests which could prevent maximum production of cotton this year has been urged by Secretary of Agriculture Charles F. Brannan. About 3 million bales of cotton from the 1950 crop were estimated lost to insects. Damage was heaviest in the Eastern part of the Cotton Belt where over 30 percent of the potential 1950 production was lost. About 23 percent was destroyed in the West South Central States. There was very little damage in the Far West, where insects are less of a problem. Pointing out that insecticides could help hold down such damage this year, the Secretary recommended that available supplies of these chemicals be used most effectively. (USDA 1414-51)...Consideration is being given to revision of standards for grades of American-Egyptian cotton. A proposed set of new grade standards was assembled and presented to various members of the cotton industry and trade for suggestions. Where practicable, these suggestions have been incorporated into the proposed standards. Currently, there are two sets of standards for American-Egyptian-one for the Pima variety and one for the Sxp variety-but both of these varieties are rapidly going out of production. It is felt that it is essential to change the standards to fit current crops of this important growth of cotton. It is proposed that the revised standards become effective on and after August 1, 1952. (USDA 1511-51)

CCC has announced that it is offering for sale its remaining stocks of upland cotton--about 10,000 bales of 1948-crop and 75,000 bales of 1949-crop. The sale will be handled by the PMA Commodity Office in New Orleans, La. (USDA 1526-51)...An initial 1951-52 cotton export allocation for production from the 1951 crop has been announced. Covering the period from August 1 through November 30, 1951, the preliminary allocation will permit 2,500,000 bales to be licensed for export during that period. In making the announcement, Secretary of Agriculture Brannan emphasized thatit was an initial allocation and not the total allocation for the next marketing season. The total quantity of cotton to be allocated for export from the 1951 crop cannot be determined until after official estimates of 1951 acreage and production are available and total domestic requirements for the 1951-52 season have been more clearly defined, the Secretary pointed out. The preliminary export allocation was made to allow domestic exporters and foreign mills to make their customary forward commitments and thus bring about a normal movement of cotton into export during the first months of the new season. (USDA 1436-51)

An open-end export allocation for all types of soft cotton wastes has been established. Quantitative restrictions on the exports of these

wastes were imposed last fall when they were originally put under export control to conserve essential domestic stocks. However, the continued high rate of raw cotton consumption has resulted in supplies of waste adequate to meet domestic requirements and at the same time permit a relatively high rate of export. Although the restrictions on amount of the wastes which can be exported have been dropped, the requirement that such exports be made under licenses continues, enabling the Department to keep the supply situation under constant review. (USDA 1466-51)

Dairy. -- Final decision has been reached by USDA to issue a Federal order to regulate handling of milk in the Detroit, Mich., marketing area. Before it becomes effective, the order must be approved by two-thirds of the dairy farmers regularly supplying the market. The market area will cover Detroit, all of Wayne County, Ann Arbor, Ypsilanti, Dearborn, Pontiac, Mt. Clemens, Port Huron, and adjoining areas in Oakland, Washtenaw, Me omb, Monroe, and St. Clair Counties. (USDA 1391-51)...Changes in the Federal order covering the Toledo, Ohio, milk marketing area to expand the area and to approve a proposal providing for a method of determining which Federal milk marketing order would apply to a milk distributor subject to two orders have been approved. Before the changes can be put into effect, however, they are subject to approval by threefourths of the dairy farmers eligible to vote on the proposal... Increase in the average monthly price of Class I milk under the Paducah, Ky., Federal milk marketing order has been recommended by USDA. A final decision by the Department will be based on views and comments of interested parties which will be received up to June 26, 1951. Under the recommendation, an average monthly increase of 22.5 cents per hundredweight (462 quarts) in the Class I milk price for the area would be provided for and certain other changes would be made in the existing order. (USDA 1446-51)

Final USDA approval has been given to changes to the Federal order regulating the handling of milk in the Chicago, Ill., marketing area. The Chicago order would be merged with the Suburban Chicago order, and the milk marketing area would be enlarged to include Waukegan, Ill., and adjacent townships. The changes must be approved by dairy farmers supplying the area before they become effective. Other changes would introduce a so-called "supply-demand" pricing provision for Class I and II milk, classify concentrated milk for fluid consumption as Class I, add 70 cents per hundred-weight to the price of Class I milk moved to distant markets as Class I. (USDA 1441-51)...USDA approval also has been given to proposed changes in the Federal order regulating the handling of milk in the Cleveland, Ohio, marketing area, which would include an upward adjustment in the minimum Class I milk price of about 21 cents per hundredweight. Before they become effective, the changes must be approved by two-thirds of the dairy farmers voting in a referendum on the matter. (USDA 1505-51) ... Amendment of the Federal milk marketing order for the Milwaukee, Wis., marketing area to bring Class I and II milk price differentials in line with a recent revision of the Chicago, Ill., milk order has been approved by USDA. Two-thirds of the producers supplying the Milwaukee market area must approve the change before it becomes effective. (USDA 1509-51)... Final USDA approval also has been given to amendments to the Rockford-Freeport, Ill., Federal milk marketing order to bring price differentials in line with the changes made in the Chicago milk order. This change

also must be approved by two-thirds of the dairy producers supplying the marketing area before it becomes effective. (USDA 1524-51)...Changes designed to improve the relationship in prices between the South Bend-LaPorte, Ind., milk marketing area and the Chicago market have been approved by USDA in amendments to the Federal milk marketing order for the former area. Approval by two-thirds of the producers supplying the area is necessary before the changes become effective. (USDA 1521-51)

Fats and Oils.—Continued restriction of industrial uses of castor oil was recommended to the USDA by the Industrial Oils Advisory Committee at a meeting in June. The advisory committee said that the Defense Food Order restricting inventories and uses of the product during the April-June 1951 quarter is making more castor oil available for the strategic stockpile and military requirements and should be continued through the July-September 1951 quarter. (USDA 1426-51)

Fruits and Vegetables.—Proposed revised U. S. grades of canned GREEN BEANS and canned WAX BEANS, changing only factors of defects and character, have been announced. The result of suggestions made by the industry and of studies made by USDA to improve standards, the proposed revisions were published in the Federal Register of June 8, 1951. (USDA 1377-51)...Members and alternates, to serve during the 1951 marketing season, on the administrative committee under the marketing agreement and order program for PEAS and CAULIFLOWER grown in the San Luis Valley of Colorado, have been named by USDA. (USDA 1392-51)...Proposed amendments to the Federal marketing agreement and order regulating the handling of California DRIED PRUNES, as recommended by USDA, were published in the Federal Register of June 16, 1951, and are available in county PMA offices in the State. (USDA 1445-51)

Amendments to the California-Arizona LEMON marketing agreement and order program became effective upon publication in the Federal Register as of June 12, 1951. (USDA 1409-51)...Standards for both U. S. No. 1 and U. S. No. 2 grades of SWEETPOTATOES for canning and for sweetpotatoes for dicing and pulping became effective for the first time on July 23, 1951. The result of a study begun in 1950 in cooperation with growers and producers, the standards will be used as a basis in contracts between growers and processors. (USDA 1503-51)... Revised standards for CANNED SWEET-POTATOES became effective July 9, 1951. The changes cover yellow and golden color types and revisions have been made in drained weights, weight variations for whole and pieces, and recommendations are made as to sirup names. (USDA 1386-51)...Location adjustments, by producing areas, of the May 15, 1951, "Legal minimum" prices for most DECIDUOUS FRUITS and BERRIES for processing, were announced by USDA on June 21, 1951. tables are so arranged that individual producers can determine the appropriate adjustment to their 1948 raw products costs for the 1951 season. The average increases to (or decreases from) the 1948 area average prices apply equally to all processors. (JSDA 1520-51)

A regulation, effective July 1, 1951 to June 1, 1952, requires that POTATOES shipped from Idaho and Malheur County, Ore., under the Federal Marketing Order covering that producing area, be limited to U. S. No. 2, or better grade. (USDA 1461-51)

#### ABOUT MARKETING

The following publications, issued recently, may be obtained upon request. To order, check on this page the publications desired, detach and mail to the Production and Marketing Administration; U. S. Department of Agriculture, Washington 25, D. C.

The Wholesale Produce Market at Nashville, Tenn. June 1951. 60 pp. (PMA) (Processed)

The Grading of Cottonseed. May 1951. 66 pp. (PMA) (Processed)

Distribution of Marketing and Processing Costs of Cottonseed-Oil Mills, 1948-49 Compared With 1947-48. June 1951. 48 pp. (PMA) (Processed)

Package and Bulk Selling of Florida Oranges. June 1951. 18 pp. (PMA) (Processed)

List of Manufacturers of Packages, Packaging Materials, and Equipment for Prepackaging Fresh Fruits and Vegetables. May 1951. 34 pp. (PMA) (Processed)

Sodium Citrate Method for Filtering Roller Nonfat Dry Milk Solids, by D. R. Strobel, W. G. Bryan, and C. J. Babcock. June 1951. 5 pp. (PMA) (Processed)

Consumer Fruit and Juice Purchases, January-March 1951, by Regions and Type of Retail Outlet. June 1951. 57 pp. (PMA and the Bureau of Agricultural Economics) (Processed)

Consumer Purchases of Selected Fresh Fruits, Canned and Frozen Juices, and Dried Fruits in May 1951. June 1951. 22 pp. (PMA and the Bureau of Agricultural Economics) (Processed)

Carlot Shipments of Fresh Fruits and Vegetables by Commodities, States, and Months, Including Boat Shipments Converted to Carlot Equivalents, Calendar Year 1950. May 1951. 25 pp. (PMA) (Processed)

United States Standards for Grades of Nonfat Dry Milk Solids. June 1951. 2 pp. (PMA) (Processed)

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